

MECHANIC STUDY GUIDE

Brakes & Braking Systems

Automobile & Light Truck Repair

Listed below are a number of items and subjects which make up the mechanic certification test identified above. An individual's ability to pass the certification test will depend upon the amount of knowledge the person has concerning these items. **NOTE:** There could be up to 5 additional pre-test questions. These questions will not count but may be used on a later version of the test. Your answers to these pre-test questions will not affect your score. Since you won't know which they are, you should answer all questions.

System Diagnosis - 21%

Load sensing proportioning valves
Brake pedal pulsation
Grabbing brakes
Brake lock-up
Dragging brakes
Combination valve
Gear lube in drums
Brake booster

Master Cylinder Diagnosis & Repair - 10%

Low fluid level
Rebuilding
Swollen diaphragm
Sinking pedal

ABS Diagnosis & Repair - 19%

Pump/motor operation
Safety precautions
Speed sensors
Wheel speed readings
3 way circuits
4 way circuits
Hose replacement

Drum Brake Diagnosis & Repair - 21%

Drum finish
Single anchor Bendix type
Self adjuster diagnosis
Noise diagnosis
Measuring
Primary v.s. secondary shoes

Disc Brake Diagnosis & Repair - 17%

Rotor thickness variation
Rotor surface finish
Caliper overhaul
Brake noise
Brake adjustment
Measuring

Repair Procedures - 12%

Brake line bleeding
Brake fluid diagnosis
Replacing wheel bearings/races
Brake adjustments

SAMPLE QUESTION:

A car has a spongy pedal. Which of the following could be the cause?

- A. Air in the system.
- B. An internal master cylinder leak.
- C. Worn brake pads.
- D. Warped brake disc.

ANSWER: A